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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,368	05/22/2001	Ramin Farjad-Rad	2789.2011-001	8681

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EXAMINER

KINKEAD, ARNOLD M

ART UNIT PAPER NUMBER

2817

DATE MAILED: 09/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,368

Applicant(s)

FARJAD-RAD, RAMIN

Examiner

Arnold M Kinhead

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 11-18, 28-32, 34 and 35 is/are rejected.
- 7) ☒ Claim(s) 4-10 and 19-27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on April 11 2002 ~~22 May 2001~~ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: A. Kinhead

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1-3, 11, 17, 18, 32, and 34³⁵ rejected under 35 U.S.C. 102(e) as being anticipated by Wei et al (US 6,369,660).

The reference by Wei et al discloses a PLL with monitoring circuit (see figures 3 and 4), and col. 5, line 19-45, describing the circuit which comprises an edge detector (114), a conductive circuit (116) with inherent resistance within the switching devices so as to charge/discharge the capacitor (150); an indicator circuit (Schmitt type comparator is shown) which provides an indication level based on the charge and a threshold setting. The method steps being inherent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 13-16, and 28-31 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Rizzo(US 4,787,097).

The reference by Rizzo discloses a Frequency lock system which includes a phase detector circuit(12), see figure 3, and col. 6, an oscillator(16), a frequency detector(41), and monitor circuit(20) with selection output (32). The phase detector is allowed to operate if the oscillator frequency and input data frequency are within a certain margin(see abstract).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wei et al.

The reference by Wei et al discloses a PLL with monitoring circuit(see figures 3 and 4), and col. 5, line 19-45, describing the circuit which comprises an edge detector(114), a conductive circuit(116) with inherent resistance within the switching devices so as to charge/discharge the capacitor(150); an indicator circuit(Schmitt type comparator is shown) which provides an indication level based on the charge and a threshold setting .

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The reference does not show a mixer type phase detector/combiner, however, it is notoriously well known in the art that the mixer type detector is a conventional PLL element used to combine two input signals and generate the desired error signal via a loop filter.

In light of the above it would have been obvious for one of ordinary skill in the art to have recognized that the general phase detector may be implemented as a conventional mixer to obtain the desired error signal for PLL application as is notoriously well known in the art.

Allowable Subject Matter

6. Claims 4-10 and 19-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnold M Kinhead whose telephone number is 703-305-3486. The examiner can normally be reached on Mon-Fri, 8:30 am -5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 703-308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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Arnold M Kinkead

Primary Examiner

Art Unit 2817

Arnold Kinkead

September 24, 2002


ARNOLD KINKEAD
PRIMARY EXAMINER